TELECOMMUNICATIONS PROJECT PLANNING 8007

(No. 31 December 2014)

The three keys to the successful planning and implementation of a telecommunications project are *budgets*, *coordination,* and *lead-time.* Any complex or costly project is going to require the expertise of several persons, and perhaps several agencies. The best thing the field TCO can do is to consult with the Telecommunications Manager to get a feel for the practicality, parallel efforts or plans, and what future reviews will be required. Once the need for action is established is to gather all appropriate financial / technical / operational people together and develop the project plan using a team-approach. It will also be necessary to involve COMPLAG in the process of the preliminary review. This is an absolute necessity for projects such as ECC relocation or upgrade, headquarters telephone system replacement, mobile-relay coverage modifications to improve a unit's overall communications capability.

The following project-planning checklist is offered as a guide for the TCO:

1. Determine need for action.

    - Communications needs of unit are not being met with current service, equipment or radio signal coverage.
    - Station, camp, headquarters or communications facility closing, moving or being added.
    - Telephone system, dispatch console upgrade or replacement imminent.
    - Employee groups or functions (telephone users) moving to new quarters or moving within existing quarters.
    - Planned reorganization, downsizing or expansion of the headquarters staff or of entire units / regions.
    - Management request for special communications services or studies.
    - Establishing or modifying interagency dispatch operations.

2. Determine what technology is involved.

    - **Radio / microwave service and / or equipment**. Identify existing frequencies and system configurations, if any, and how they relate to the project at hand.
    - **Wire / Cable / Fiber optics**. Configuration and condition of building distribution wire and cable are important aspects of assuring that voice and data transmission needs are met. Type and size of existing wire and

conduit as well as size and condition of telephone equipment room(s) are significant factors in determining what type of service and equipment will work best. Future construction projects buildings and grounds need to be factored in as well due to trenching demolition, etc.

- **Voice service and / or equipment**. Do employees use call management? Voice-mail? Fax machines? Answering machines?

- **Data service and / or equipment**. Don't overlook the expertise of your local Information Technology coordinator. If computers, modems and data lines are involved, be sure this person is on your project planning team to insure the project equipment is in compliance with California Technology Agency (CTA). Furthermore, CTA and Headquarters IT staff approval is required prior to upgrading or replacing computer hardware or software in our ECCs, Command Centers, Fire Stations, and Mobile Communications Centers.

- **Video service and / or equipment**. Setting up video conferencing service may require CTA/ PSCO and department's IT staff expertise and approval.

3. Determine critical timeframes.

    - **Operational requirements**. When does the project need to be completed to meet management and operational objectives? Is there any slack to allow for budget problems, equipment delivery delays, etc? Has the team considered a fallback plan in case of unavoidable project delays?

    - **Budget and Office of Procurement requirements**. Utilize the Senior TCO / Telecommunications Manager and your own unit's administrative officer to assist in nailing down the "financial reality" of your project. Keep in mind that if a project needs to go to bid through the Request for Proposal (RFP) process, it takes six months to a year *minimum*. If the Budget Change Proposal (BCP) process is taken, it may take eighteen months to two years to realize funding. Projects that require Major Capital Outlay funds may take five to seven years to complete. Financial grants need also to be explored to see if any part of the proposed project can be funded through grant monies. The TCO needs to be aware of the procurement requirements with regards to Department of General Services' Mandatory, CMAS, and approved sole source vendor contracts.

    - **PSCO engineering requirements**. The more complex the project, the longer it will take for the engineers to design it and for the technicians to install it. Costly and complicated jobs like an ECC upgrade need the guidance of a project engineer. This person should be involved from the beginning in assisting the TCO with project planning.

- **DGS RESD / CTA requirements**. The DGS Real Estate Services Division and Office of Chief Information Officer (IT) are involved in new construction as it applies to telecommunications projects and their time requirements will roughly parallel those of the PSCO for a given project. CAL FIRE engineering staff at region or Sacramento HQ should be consulted any time DGS RESD is a factor.

- **CAPCOM, (Capital Outlay Command)** Committee meets monthly to discuss current and future major and minor construction projects with DGS RESD. All CALFIRE construction projects must be processed through this committee.

- **Vendor requirements**. Your project timeline should take into account the time necessary for vendor participation in the bid process, as well as delivery and installation time.

- **Building contractor requirements**. Consider wiring schedules and the approximate date a new facility will be ready for communications technicians and installers to begin work.

- **Utility company requirements**. If the project involves adding or modifying telephone or power service, contact the appropriate service representative for assistance.

There are innumerable details in any major project. No one expects the TCO to have all of the answers, instantly. Success will follow good planning, good teamwork and good follow-up.

ECC console replacement projects normally take several years to complete. It is not uncommon for a large project involving construction to take several budget years to complete and or get approval. This is why ECC console replacements are put on a prioritized schedule by the Telecommunications Manager with input from the department's telecommunications staff.

(see next section)

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